

# ULTRASOUND COLOR CHARACTERISTIC MAPPING

## Abstract of Disclosure

An ultrasound machine is disclosed that displays a color representation of moving structure, such as a cardiac wall tissue, within a region of interest on a monitor. The color representation is generated by displaying at least one color characteristic corresponding to a movement parameter of the structure, such as velocity or strain rate. The movement parameter is mapped to the color characteristic by apparatus comprising a front-end that generates received signals in response to ultrasound waves. A Doppler processor generates a set of parameter signals representing values of the movement parameter within the structure. A control processor adaptively generates a mapping function based on the distribution of the parameter signals to map the parameter signals to a set of color characteristic signals. A display processor applies the mapped values of the color characteristic legend to the values of the movement parameter representing the moving structure, to display a color representation on the monitor in response to the mapping function.

## Figures